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HILL TOP

*Special Price List
For Orchardists*

[1961] p. 19



"STURDY ROOT" brand

TREES WITH A FUTURE

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U. S. Department of Agriculture

SPECIALTIES

DWARF AND SEMI-DWARF TREES

CERTIFIED VIRUS FREE CHERRY

Leave 1-94 at Hartford or Lawrence Exits

Located one mile south of Red Arrow Hwy, 3 miles East of
Hartford or 3 miles West of Lawrence.

Hartford

Phone 2031

Michigan

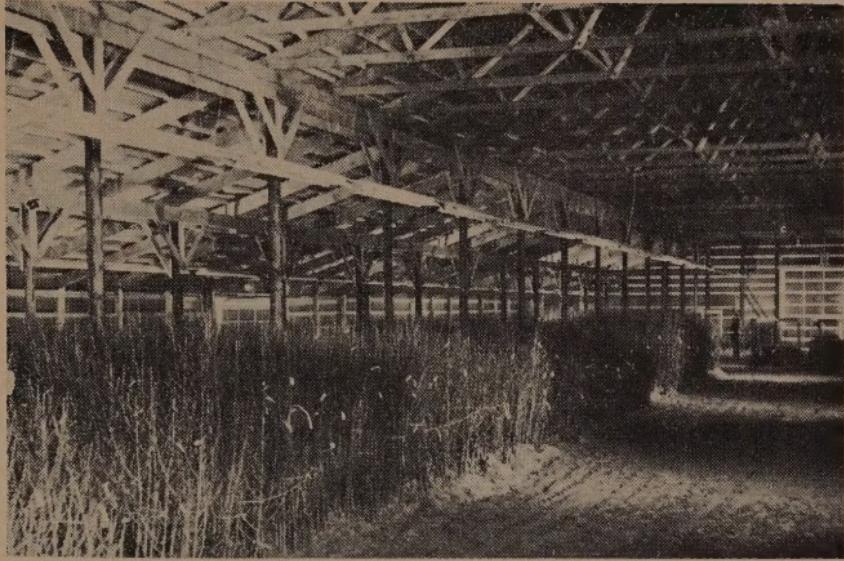
HOW "STURDY ROOT" CONTROLLED SIZE TREES ARE PRODUCED

The basis of top quality dwarf and semi dwarf fruit trees is the rootstock. Dwarfing rootstocks are clonal, propagated vegetatively, not produced from seed. Mother plants are set out in rows in beds of specially prepared soil. As shoots from these begin to grow, earth is hilled up around them until the bed appears as in the picture on page 6. During summer and late fall roots form on most of the buried shoots. Early in the following spring the earth is pulled away and the shoots cut off at ground level. These shoots are then graded and the best planted out in rows in the nursery field. These grow into little trees and by mid-summer they have grown to budding size. Crews of expert budders set a bud of the desired variety in each of the stems of these rootstocks. They are sprayed, cultivated, hoed and cared for through the summer. The next spring the top of the rootstock must be cut off, by hand, just above the bud that was set the previous summer. Again the tree must be sprouted, staked, trained, sprayed, watered, cultivated and given the most careful attention while the bud is growing up to make a HILL TOP "STURDY ROOT" brand quality fruit tree.

This entire operation requires tremendous amounts of hand labor and unceasing supervision. There is no substitute for careful attention to every detail in the production of these trees and is why profit-producing trees are never sold in the bargain market.

BUY WITH CONFIDENCE

Because of the extra "Grown In" quality of our trees we have discontinued the practice, followed by most nurseries, of purchasing trees to supplement their own supply. You can be assured that when you order trees from us you will receive our own "Sturdy Root" brand trees. If you want varieties we do not have and wish us to supply them for you we will attempt to do so and in every case will advise you that they were not grown by us.



"Sturdy Root" brand trees heeled in sand in our new nursery storage building. These trees were in perfect condition for planting in the spring with no dead buds or twigs.

OUR NEW NURSERY STORAGE BUILDING

We have always followed the practice of digging our trees in the fall and, after grading, they are bunched and heeled in sand in our heeling bed. We have proven to ourselves and thousands of loyal customers that this method is the most satisfactory way to store fruit trees. Because there is danger that trees not adequately protected by snow or evergreen cover can be damaged by severe cold spells, and because our ever-expanding market requires that we ship some orders before our ground thaws, we have constructed a new nursery storage building. This building is somewhat different from most nursery storage buildings. It covers an area 100 x 225 feet and the trees are stored here, heeled in sand the same as they were outdoors, except that they will be protected from excessive cold spells that we might have during the winter. This storage is double-insulated and equipped with an irrigating system so that we can control soil moisture content to keep the trees in peak condition at all times. These facilities will enable us to improve our shipping service in the spring as we will be able to send our southern orders out earlier than when the trees are heeled outdoors and the ground is frozen deep. Storing trees in this manner not only keeps them fresh and full of vitality, but prevents nearly all of the injury inherent in the bare-root method of storing trees in nursery cellars. As these trees are stored standing up and never piled in heaps and walked on, you will not have the broken branches and skinned bodies or dried out trees.

MEET THE FOLKS

To those who are not acquainted with us, we would like to introduce ourselves. Our business was founded by the late J. H. Heuser. While he sat at the drafting board in his engineering office in Chicago, he dreamed of owning a fruit farm. At last he purchased a 47-acre farm in southwestern Michigan. Encouraged by the production of a young peach orchard, he expanded his holdings. Being trained in engineering, he was very precise about the plantings and the trees that went into them. He was not satisfied with the quality of trees available and decided to produce his own, beginning with peach trees. Soon the neighbors were asking for some of his trees, and our nursery business was born.

Our business is a partnership consisting of Eugene J. Heuser, Wallace E. Heuser (Eugene's son), Dorothea L. Day, and her husband, Paul Day. Two other sons of Eugene, Kenneth and Robert Heuser, are active in the management of the business.

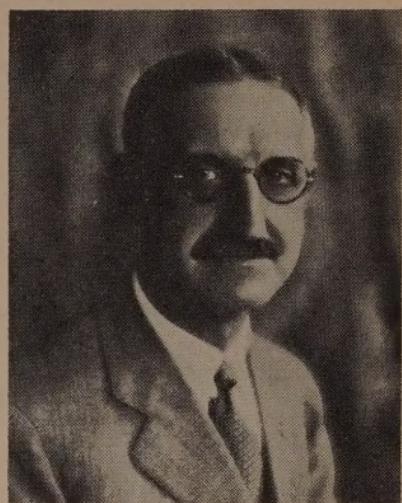
We now operate over 700 acres; about 450 are

in orchards, and a little over 100 in fruit tree nursery stock.

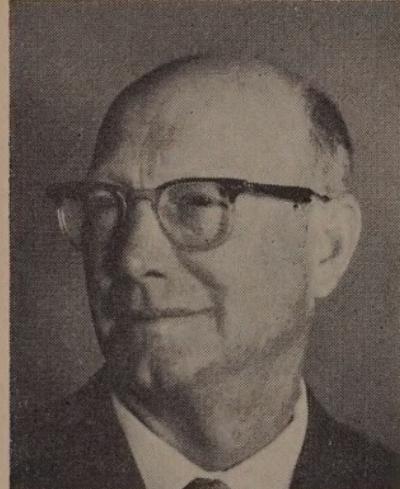
The operation of the orchards along with our nursery business assures you that we understand the problems and needs of the grower.

We feel this is very important in the production of the kind of trees you want. It also enables us to grow new varieties and strains on a commercial basis and

evaluate them from the market standpoint. As we grow primarily for the commercial grower, you will note that our list is confined to the best of the commercial varieties. We are constantly on the alert for new and better varieties, but will not offer one for commercial planting unless we are convinced of its merit.

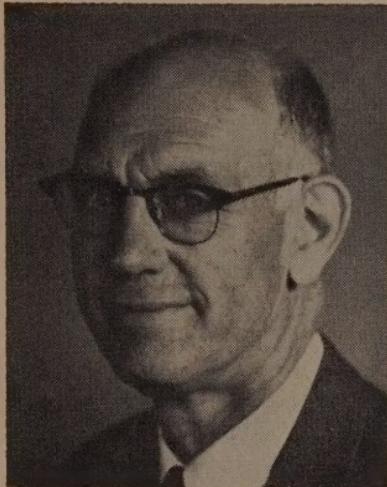


J. H. Heuser 1888-1954
The founder of our business.

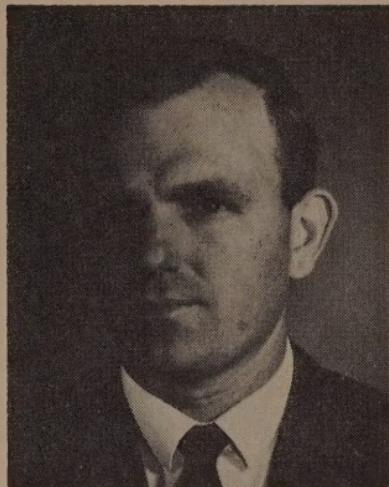


W. Paul Day
Supervisor of Maintenance
and equipment sales

AT HILL TOP



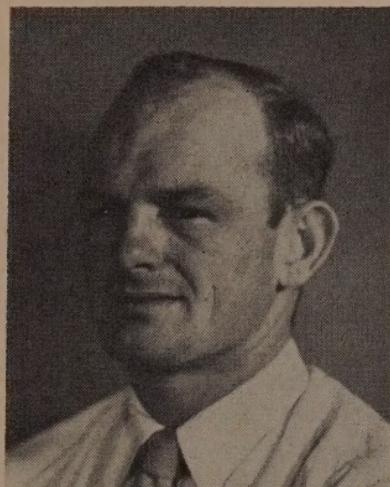
Eugene J. Heuser
General Manager



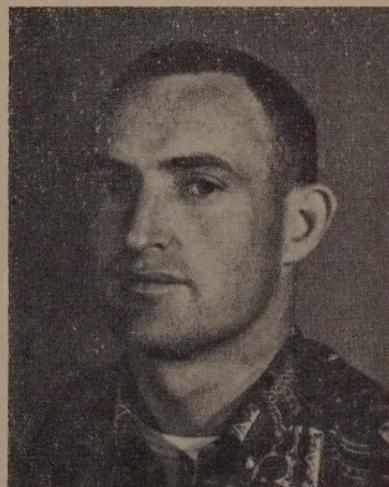
Wallace E. Heuser
Manager of Nursery production and fresh fruit sales

We are proud of the trees we grow and every member of the Hill Top team has a personal interest in seeing that every order is satisfactory. To help you in ordering, may we point out that the total number of trees ordered can be added together to earn the lowest quantity price. (Small fruits, grapes and rootstocks excepted).

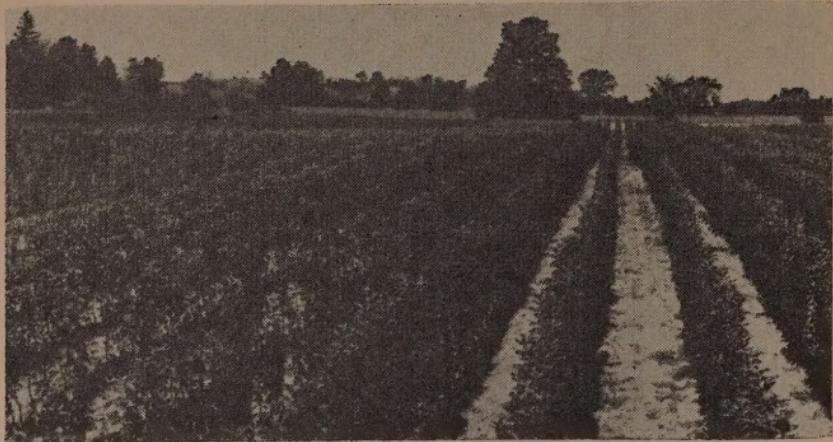
Please give us complete shipping instructions and a shipping date. We do not charge for packing. Prices listed are F.O.B. Hartford, Mich., and subject to change without notice. Trees are offered subject to prior sale and this list supersedes all previous lists. All prices are for cash on delivery. Terms can be arranged to responsible parties if arrangements are made prior to date of delivery.



Robert S. Heuser
Manager of fruit production
and Packing House



Kenneth A. Heuser
Supervisor of Personnel



Rows of healthy, vigorous apple trees on Malling rootstocks. These high budded one year old trees stand six feet high.

THE MALLING ROOTSTOCKS

The dwarfing of apple trees by propagating them on specialized rootstocks is not new. This practice has been carried on in Europe for over two centuries. They used different rootstocks in different parts of the country and, in many cases, the same rootstock was used under several different names which caused much confusion in the propagation of trees on these roots.

Many years ago the East Malling Research Station, in England, collected together all of these different rootstocks that could be obtained in Europe, grew them, and classified them according to their different individual characteristics. After the selections were made, each was given a number, and each selection was propagated from one plant by vegetative propagation so that all the progeny of each number or type is uniform. This was a great step forward in the development of dwarf and semi-dwarf fruit trees, as it is now possible to know that if you use one number of Malling rootstocks they will all be the same, and they will be different from another particular number. A great deal of research has been done with these dwarfing rootstocks in this country over a period of about twenty-five years. As a result of this work it has been found that, for most parts of the country, the following numbers of Malling rootstocks seem to be the most desirable for dwarf and semi-dwarf trees.

MALLING IX—for true dwarf trees see page 7.

MALLING VII. An open, spreading, semi-dwarf about the size of an average peach tree. Sturdy, winter hardy, uniform growing, and transplants well.

MALLING II. A sturdy, winter hardy tree that bears young and heavy. A little larger and more upright growing than Malling VII. Good for the less vigorous varieties such as Jonathan and Red Rome.

MALLING XXV About standard size, bears early.

THE MALLING MERTON ROOTSTOCKS

This series of Rootstocks was developed at East Malling Research Station and the John Innes Horticultural Station, which is located at Merton; therefore, they were called Malling-Merton, or MM rootstocks. They were bred primarily for resistance to Woolly Aphids, which is a serious problem in England, and were made by crossing Northern Spy with certain stocks of the East Malling series. These crosses were made over thirty years ago and fifteen seedlings were selected, numbered consecutively from MM. 101 to MM. 115. The four most promising, MM. 104, MM. 106, MM. 109 and MM. 111, have been tested in this country since about 1954. Actual orchard performance of the MM rootstocks in this country is limited. However, some characteristics are beginning to show up in the shape and size of trees and bearing habits. At East Lansing, Mich. commercial varieties on MM. 106 have come into bearing before any of the others on the Malling-Merton series. Trees on MM roots seem to get off to a good start and grow well in the orchard. We recommend that these trees be planted on a trial basis in order that more trees will be distributed and better information can be assembled on their habits under different growing conditions.

MM. 106—Similar to Malling VII in size and bearing habit but much better anchored. On soils of low fertility this stock may be smaller than Malling VII. Does not sucker as much as M VII.

MM. 111—Induces early and heavy bearing, with tree size comparable to Malling II, but better anchored than Malling II. This stock is worthy of trial for increased production and better anchorage in this size range.

MM. 104—Makes the heaviest producing tree of any rootstock. Starts bearing early and grows to about the size of, or a little larger than, Malling II. Makes a well anchored tree that will not require supporting posts, and is considered one of the most promising of the MM series.

MM. 109—A large tree equal to standard in size. Compares with Malling II in yield and anchorage and has been quite resistant to drought in several tests. May have a place where a larger tree is desired.

NOTE: Please add 15¢ to the price of dwarf apple trees shown on page 22 for trees on Malling Merton roots.

OTHER ROOT STOCKS

Following our policy of making new and promising rootstocks available to the commercial grower for trial, so widespread over-all evaluation on a commercial basis can be obtained in the shortest time, we offer trees on the following rootstocks.

ALNARP-2 (A.2). This rootstock was developed at Alnarp's Fruit Tree Station in Sweden and was released for propagation in 1944. It has been tested under sub-zero conditions in northern Sweden and is vigorous and hardy. Tree size will compare favorably with Malling II. We suggest trial plantings of trees on this rootstock in those areas where hardiness is a prime factor.

MALLING XXV. Trees on this rootstock are larger and have cropped more heavily than M.II. On good soil they are as big as trees on M.XVI. Results so far indicate this is a rootstock of unusual vigor with the ability to induce fruiting at an early age. Trees will mature nearly as large as standard trees.

MALLING 26 (M.26). This new rootstock has been released at East Malling, England, and it is hoped it may be the answer to a stock that produces a tree which will range in size between M. IX and M. VII. Trees will be available as soon as we can produce sufficient rootstocks.

INTERSTEM TREES. There is considerable interest by some growers and experiment station workers in trees on seedling apple roots with a section of Malling IX grafted into the stem. This is called a double-worked or interstem tree. Indications are that these trees will mature to a size between Malling IX and VII and have better anchorage. Other combinations would be MM104 or Alnarp 2 for rootstocks with a dwarfing interstem section.

TOMENTOSA. Peach and plum on Tomentosa are quite dwarf and are suitable for back yard planting or for home orchards.



One of our propagating or "stool beds." This mid-summer view shows the bed after the final mounding. It has been mulched with straw to conserve moisture. See story inside front cover.

DWARF APPLE TREES

Apple trees propagated on Malling IX rootstocks usually make a tree about six to eight feet tall and about the same spread. These little trees are ideal for home garden planting. They are easy to care for and spray, and bear abundant crops starting the second or third year. They can be trained as espaliers for planting on patios or along fences. The large tasty apples produced will be a treat to the eye as well as the palate.

Many commercial growers are becoming interested in growing dwarf apples as a commercial venture. Tests now being carried out at Experiment Stations across the country indicate that orchards on Malling IX roots, when properly planted on good sites, will make phenomenal records of production. Planted about 8 feet apart in rows spaced 15 feet apart on good rich well-drained soil in a location protected from strong winds, these trees will produce heavy crops. They should be supported by wires or stakes and irrigation should be available. We suggest trial plantings and welcome visitors to our own trial block now in its seventh year.

NOTE: When planting dwarf trees make sure that the bud union is 3 to 4 inches above the leveled ground.

Varieties available described on pages 9-13. See page 22 for prices. Write or call collect for special prices on larger quantities.



This shows the way we bud the malling trees high so that when the tree is planted with the bud 3 to 4 inches above the ground the tree will be securely anchored. Observe the uniformity, vigor and well healed bud unions.

Grand Valley, Colo.—“Wish to tell you that our dwarf apple trees we got from you this spring are doing fine, every one is alive, and putting on a good growth.”

SEMI-DWARF APPLE TREES

The interest in apple trees propagated on semi-dwarf rootstocks has been increasing in every section of the country. The advantages of growing smaller trees of high productive capacity is readily apparent and many growers feel that these trees will help to produce higher quality fruit at a lower cost and thereby enable them to compete more equitably in today's markets. Semi-dwarf trees are planted closer, resulting in more trees per acre and more bearing surface exposed to the sun to produce better color. The savings in pruning, spraying, thinning, propping and picking of smaller trees are obvious and the greater bearing surface combined with the heavier bearing characteristics of these trees makes for greater production per acre with lower growing costs per bushel.

The size of tree depends on several factors, one of which is, of course, the rootstock upon which it is propagated. However, the soil, the variety, and the care the trees are given are all factors and will affect the size of the tree.

For further size comparisons and suggested planting distances see chart on page 25. Varieties available on Semi-dwarf rootstocks described on pages 9 to 13. For prices see page 22. Write or call collect for prices on larger quantities.

NOTE: WHEN PLANTING DWARF TREES MAKE SURE THAT THE BUD UNION IS 3 to 4 INCHES ABOVE THE LEVELED GROUND.



This Yellow Delicious tree on Malling VII is in its third summer. Note the quantity, size and quality of the fruit as well as the vigor of the tree.

Barrington, Ill.—“Congratulations on a very fine job. I could rate the trees and all of our dealings with you about 110 %. We will be back next spring.

NEW OUTSTANDING

Red Prince Red Delicious

(U. S. Patent Applied For)

RED PRINCE originated as a limb sport on a tree of regular Delicious in the orchard of R. G. Horner at Martinsburg, West Virginia. When discovered in July 1954 it was bearing 45 fruits, all of which showed good color, even in the heavily shaded areas. This sport was purchased by Edward W. and Henry W. Miller in May 1955. The Millers immediately began to propagate and topwork trees in the Consolidated Orchard Co. and The Romney Orchard Co. plantings in West Va. Trees now in the second generation are bearing heavy crops of highly colored top quality fruit. The color is solid bright red blush with an attractive lenticular pattern. The color of RED PRINCE does not fade and "buck skin" in extreme hot weather and stays bright and shiny through normal picking maturity. Shape, flesh texture and quality are excellent. Growers and horticultural experts, who have seen this sport bearing in West Virginia, are enthusiastic and feel it is the most outstanding sport they have seen. Having originated in West Virginia it is particularly adapted to planting in the east and midwest areas. We have exclusive propagating rights for RED PRINCE and will have a supply of our famous "Sturdy Root" brand trees of RED PRINCE for planting the fall of 1962 or spring of 1963. We are sorry our very limited supply of trees of RED PRINCE for this year is sold out. The interest shown by those who have seen this apple indicates there will be heavy demand for it, so we would suggest that you reserve yours at an early date to avoid disappointment. We are now booking orders for RED PRINCE. Trees will be available on standard and dwarfing rootstocks.

EARLIEST COLORING RED QUEEN RED DELICIOUS

This apple was discovered as a limb sport on a Starking tree in 1952 in the Iron Mountain Orchard of Consolidated Orchards of Paw Paw, West Va. Mr. Henry W. Miller, of Consolidated Orchards, was quick to see the potential of this sport and made extensive plantings of trees on Malling VII roots. Production on these trees has proven that this apple is probably the earliest coloring of any of the double red strains. It colors similar to Starking but has a much higher color factor. Fruit is average-to-large in size and of good quality. We feel this apple is the answer to the color problem for growers in southern areas where it is sometimes difficult to obtain sufficient color by time of maturity. We are the licensed propagators for RED QUEEN and trees of this fine new variety can be obtained only from us. Trees on standard and Malling rootstocks will be available for fall of 1962 and spring of 1963 planting. May we suggest that you order early to be assured of obtaining trees of RED QUEEN. Sorry our very limited supply of trees for this season has been sold.

IMPERIAL DOUBLE RED DELICIOUS

Plant Patent No. 1805

We are licensed to propagate and sell this outstanding new super-sport of the Red Delicious family.

The Imperial Double Red Delicious is a full tree sport with all-over red blush color, and without stripes. Several days before normal harvest the Imperial reaches practically 100% extra fancy coloration and holds on the tree until full maturity without becoming "blackish".

Discovered in one of the Elon J. Gilbert orchards near Yakima, Washington, several years ago, the Imperial tree has consistently produced good crops of well-sized, beautifully colored apples. It is now about 14 years old and is of normal size. Keeping quality of IMPERIAL has been termed excellent. This year we offer trees of our own growing on the following roots: Domestic seedling, Malling II, VII, IX. The demand for this fine apple has resulted in the sale of a large part of our stock of these trees as this goes to press. Orders will be filled as received as long as stocks lasts.

Please add 25¢ to the price of apple for rootstocks desired listed on page 22.

NEW APPLE VARIETIES

BARRY (S-IX). Fruit is medium to large in size, solid dark red blush in color. Quality would rate as good to very good for both culinary and dessert uses. Ripens two weeks before McIntosh.

BLAZE (VII). A new apple introduced by Illinois Agricultural Experiment Station. Ripens 3½ weeks ahead of Jonathan in Southern Illinois. Skin is thin, tough, glossy, ¾ red over yellow ground color. Flesh is firm, crisp, good in quality but less tart than Jonathan, which it resembles. Tree is vigorous and productive.

MUTSU (VII-IX). This apple originated at the Aomori Apple Experiment Station in Japan in 1930. A cross between Golden Delicious and Indo, it has many of the characteristics of Golden Delicious as it generally grows in the east. Keeps several months longer than Golden and is reported to be highly resistant to russetting. Should be picked as late as possible to secure maximum quality.

SPARTAN (S-II-VII-IX). A new apple introduced by the Summerland, B.C., Experiment Station. An attractive McIntosh-type apple maturing about two weeks after McIntosh. Has firmer flesh and excellent dessert quality. Considered a better storage variety. We feel this is worthy of trial.

TYDEMAN'S RED (VII). A new apple from England. Looks promising for a late summer apple. The bright color and good quality of this apple indicate it is worthy of trial. We picked mature fruits, with excellent color, on August 30th. Flesh favors McIntosh, but is much firmer.

FOR ABOVE VARIETIES, PLEASE ADD 10¢ PER TREE TO THE PRICE OF APPLES ON PAGE 22.



Proper spraying is one of the most important operations in growing fruit trees. This specially built sprayer completely covers five rows of trees at one time.

APPLE VARIETIES

NOTE: Normally, we bud most varieties on the various rootstocks; however, due to propagating losses and unusually heavy early sales, we are sold out of some varieties on certain rootstocks. To help you, we have indicated the trees available on each rootstock at the time this list is printed. Letters or numerals directly following the variety name indicate the rootstocks available for that variety. S indicates Standard, or seedling, root. Roman numerals indicate the East Malling rootstock. 106, 111, 104, etc., indicate Malling Merton roots.

Varieties listed in order of ripening in southwestern Michigan.

✓ **LODI (S-IX).** A new and larger strain of yellow Transparent. Matures a few days after Yellow Transparent.

✓ **WILLIAMS EARLY RED (S).** A large red striped apple which resembles Delicious in shape. Popular early variety.

✓ **BEACON (or FENTON) (S-II-VII-IX).** Ripens here about Mid-August. Strong trees bear young. Fruit is uniform in shape, large, colors to bright red that takes a high polish. Fruits color all over, even in the shady part of the tree.

✓ **BLAZE (VII).** See new varieties

✓ **TYDEMAN'S RED (VII).** See new varieties.

✓ **BARRY (S-IX).** See new varieties

✓ **CORNELL RED McINTOSH (II-VII).** A fine bright colored sport of McIntosh from New York State. It appears to be identical with McIntosh except for the much improved color.

✓ **ROGERS RED McINTOSH (S-II-VII-IX).** This superior bright red strain colors to a solid blush without stripes. Flesh is firmer than standard McIntosh. Proven by many years of production in commercial orchards.

✓ **SPARTAN (S II-VII-IX).** See new varieties.

✓ **ANDERSON RED JONATHAN (II-VII-A.2).** An excellent strain of Jonathan with a fine bright red color. Attains maximum color a few days later than Double Red Jonathan, but has very good storage qualities. Early bearing, heavy annual production. A fine apple for home or commercial planting.

> **DOUBLE RED JONATHAN (VII-IX-XXV-109).** A good early coloring strain of Jonathan. Fruit is medium to large in size. Matures to a smooth attractive red color. The best strain for early markets.

> **EVARTS RED DELICIOUS (II-VII-IX).** An excellent early coloring bright red type. Somewhat striped early, blending into an attractive solid red color at maturity. Thousands of producing trees have proven this to be a good strain.

> **IMPERIAL DOUBLE RED DELICIOUS (S-II-VII-IX).**
See Page 10

> **RED PRINCE RED DELICIOUS.** See Page 9. Sorry, sold out for this season. Please order early for next year.

> **RED QUEEN RED DELICIOUS.** See Page 9. Sorry, sold out for this season. Please order early for next year.

> **VANCE RED DELICIOUS (VII).** An early-coloring sport of Delicious that develops a solid red blush color with very little stripe. Brighter than Starkings and colors about one week earlier.

> **NORTHERN SPY (VII).** One of the finest of the old time varieties. Used principally for processing. Requires pollination.

> **YELLOW DELICIOUS (S-II-VII-IX-IX/S-109-A.2).** A very prolific early-bearing variety with golden yellow fruits of exceptional quality. Good either for fresh or processing market.

> **MUTSU (VII-IX).** See new varieties.

> **IDARED (S-II-VII-IX).** Fruit is large, uniform, bright cherry red, smooth finish with firm-textured white flesh. Matures just after Jonathan. Trees are strong, vigorous growers; bear young and heavy. One of the best keepers.

> **DOUBLE RED STAYMAN (S-VII-IX).** A much improved color strain of this fine variety. Can't be beat for flavor, quality and late keeping.

> **VIRGINIA RED WINESAP (VII).** A selection of Red Winesap that is grown extensively in Virginia.

> **RED WINESAP (VII).** An improved red strain which sizes well and does not get black or russet.

> **GALLIA BEAUTY RED ROME (S-II).** One of the best strains of Red Rome Beauty. Fruit is a solid bright red, good sized, and one of the best late keepers.

See Prices of Apples on Page 22.

SOUR CHERRIES

MONTMORENCY. The best red tart cherry for home and commercial processing. These trees are grown on Virus Free rootstocks, budded with virus-free buds, and are the best buy in cherry trees available anywhere.

Sorry, the demand for these Montmorency trees has been so great that we are sold out. Many growers are ordering our Montmorency trees now for delivery in the Spring of 1963.



"Gene" Heuser inspecting one year old Virus Free cherry trees. Note the wide spacing, heavy straight trunks and heavy branching.

DWARF SOUR CHERRY

NORTH STAR. This tree is smaller than Meteor, very productive and resistant to leaf spot and brown rot. The large cherries are bright red, turning to mahogany red. Ripens about July 1st. Tree is very hardy.

METEOR. A new variety from Minnesota. The large, bright red, yellow-fleshed fruit is juicy and has a mild, acid flavor. Tree is semi-dwarf and hardy. Ripens 7-10 days later than North Star.

PLEASE ADD 15¢ to price of sour cherries, Page 23

SWEET CHERRIES

We grow sweet cherries on both Mahaleb and Mazzard rootstocks. Mazzard is a form of wild sweet cherry and is hardier and more robust than Mahaleb. It is considered best for sweet cherry, particularly on heavier soils. All of our sweet cherry buds are cut from virus free trees, grown in an isolated location to minimize possibility of virus infection.

Listed in order of ripening in S. W. Michigan:

➤ **BLACK TARTARIAN** (Mazz*) An old favorite, early black sweet cherry.

➤ **CHINOOK** (Mah). A new early cherry from Washington. Fruit is large, heart shaped to round, with smooth, glossy, mahogany-colored finish. The tree is vigorous, upright-spreading, and productive. Blossoms 1 to 2 days, and ripens 4 to 10 days, earlier than Bing, which it closely resembles in appearance. CHINOOK requires cross-pollination, but it is a good pollinator for other varieties. For CHINOOK trees please add 10¢ per tree to sweet cherry prices, Page 23.

➤ **RAINIER** (Mah). Tree is vigorous, spreading to upright, very productive, early bearing and apparently extremely hardy. It ripens 3 to 7 days before Bing and Napoleon. Fruit is slightly egg-shaped, firm, of high quality, and attractive. Skin is yellow with considerable pink blush. RAINIER requires cross pollination, but is a satisfactory pollinator for other varieties. Sorry, our limited supply of Rainier is sold out for this season.

➤ **HEDELINGEN** (Mah-Mazz*). A heavy producer of large black sweet cherries of the Lambert type. Ripens ten days later than Schmidt and is more resistant to cracking than many sweets.

➤ **NAPOLEON** or Royal Ann (Mah-Mazz*). A golden yellow cherry with a red cheek. One of the best for Maraschino Cherries.

➤ **SCHMIDTS** (Mah-Mazz*). One of the best known varieties. Fruit is large, black, firm fleshed and ships well. Requires pollination for good crops.

➤ **VAN** (Mazz*). A new black sweet cherry from Summerland, B. C., Experiment Station, Canada. It sets very heavy crops and may tend to overbear. It is a good pollinator, but does require pollination. Trees are vigorous and are extremely winter-hardy.

➤ **WINDSOR** (Mah-Mazz*). A late dark red sweet cherry. Very productive and much in demand for processing.

POLLINATION OF CHERRIES: Sweet cherries are self-unfruitful so two or more varieties should be planted. Napoleon, Black Tartarian, Hedelfingen, Windsor and Van are excellent pollinators.

Montmorency is self fruitful.

Please see Page 23 for prices of sweet cherries.

* Add 10¢ for cherry on Mazzard roots.

Ironwood, Mich.—“Received your Malling stock and was highly pleased. Matter of fact I never did see anything so well rooted as those Malling trees. I think that you have the best system of the growers that I had contact with.”

PEACH TREES

NOTE: We have a few peach trees on the dwarfing rootstock Tomentosa. (See description, page 6.) The letters in parentheses following the name indicate the rootstocks available. S—Standard or Seedling; T—Tomentosa. Listed in order of ripening in southwestern Michigan.

— **CARDINAL (S).** A new USDA peach that ripens ten days before Redhaven. A medium sized, bright red, clingstone variety with yellow flesh and good flavor. An excellent peach for local trade or overnight market.

— **SUNHAVEN (S)** A very early, bright red, medium to large peach for the fresh fruit market. Freestone when fully ripe; otherwise, a partial cling. Clear yellow, fine textured firm flesh of good flavor. Be sure to try this one.

— **REDHAVEN (S-T).** Very early, high-colored yellow fleshed freestone peach. One of our most important commercial varieties.

— **WASHINGTON (S).** A new freestone peach of outstanding size, color, firmness of flesh, texture and flavor. Ripens about 3 weeks ahead of Elberta and is reported to be very hardy to spring frosts. From the Virginia Agricultural Experiment Station. Limited supply available for trial.

Please add 10¢ per tree for WASHINGTON

RICHHAVEN (S-T). Large, nearly round, uniform fruits on vigorous, productive, hardy trees. Color is golden, overlaid with bright red blush on the sunny side, and stripes of red and gold on the other side. This high quality freestone peach is the promising new variety in the Halehaven season.

HALEHAVEN (S). A good midseason variety for all-around use.

AMBER GEM (S). A yellow fleshed clingstone variety, generally used for commercial canning.

— **BLAKE (S).** A new variety that is rapidly gaining top place in popularity. The large round peaches are three-fourths red over bright yellow

and hang well on the tree. Flesh is bright yellow with contrasting red around the pit cavity. Quality similar to J. H. Hale. Sorry, sold out for this season.

➤ **KALHAVEN (S-T).** A high quality, large, smooth, yellow-fleshed peach, ripening just before Elberta. Resembles J. H. Hale. An excellent shipper.

LORING. Introduced by the Missouri Experiment Station in 1946 as a cross between Frank and Halehaven. This large, freestone, yellow-fleshed peach, coming ten days before Elberta, should help to fill the gap between Halehaven and Elberta.

➤ **REDSKIN (S-T).** A cross between J. H. Hale and Elberta. Bright red, yellow-fleshed, freestone, of fine quality for eating, canning or freezing. One of the most promising of the new varieties for the late sesaon.

➤ **ELBERTA (S).** The standard, late, commercial peach. Heavy producer of large, yellow fleshed firm fruit.

➤ **J. H. HALE (S).** Very large, round, firm, smooth peach which always brings top market prices. Must be well pollinated for best crops.

➤ **RIO-OSO-GEM (S).** A late self-fruitful variety which resembles J. H. Hale but has a brighter color.

Peach trees priced on Page 23.

THE "HILL TOP" GUARANTEE

We will replace, without charge, any trees sold by us which fail to start growth, provided they are planted on suitable soil and properly cared for, and that we are notified of such loss BEFORE THE FIRST DAY OF AUGUST following planting. All trees are guaranteed true to name; and if any should prove otherwise, our liability will be limited to replacement of same or refund of the purchase price.

PEAR TREES

NOTE: All of our pear are budded on Bartlett pear seedlings.

↗ **DAWN.** This new pear from the USDA ripens about two weeks before Bartlett. Fruit is of high quality, nearly free of grit cells and similar to Bartlett in shape. Tree is moderately vigorous and susceptibility to fire blight is about the same as Bartlett.

Please add 10¢ per tree for Dawn.

↗ **MOONGLOW** Ripens about two weeks before Bartlett. Fruit is attractive, moderately juicy, nearly free of grit cells and quality is good. Tree is vigorous, very upright and fruits at an early age. Tree appears to be very resistant to Fire Blight and is recommended in areas where blight is a major problem.

Sorry, supply of Moonglow sold out for this year.

↗ **BARTLETT.** The best all-around midseason pear for canning and fresh fruit market.

↗ **BOSC.** A late ripening russet pear. Good for market but mostly used as a pollinator for Bartlett at the rate of about 1 Bosc for 9 Bartlett.

↗ **CLAPPS FAVORITE.** Large lemon yellow pears with a bright red cheek. Trees hardy and productive, bear annually.

↗ **HOWELL.** A well-known variety producing bright golden yellow pears, red cheek. This pear has been found to be a good pollinator for Bartlett.

↗ **LAWRENCE.** A late, blight resistant, bright yellow pear. Ripens after Kieffer. Tends to be a shy bearer but blooms every year. Most useful as a pollinator for Bartlett.

↗ **MAGNESS.** A new USDA introduction which ripens about one week after Bartlett. Fruit is medium in size, generally oval in shape, lightly russeted. When mature fruit is of the highest quality. Tree is very vigorous and spreading. It bears at about 6 years. Pollen is sterile but will set with most common varieties. Trees very resistant to Blight. Limited quantity available for trial.

Please add 10¢ per tree for Magness.

Please see prices of Pear, Page 23

DWARF PEAR TREES

Pear trees can be dwarfed by propagating them on the roots of Angers Quince. There are several different types of these quince roots which produce different degrees of dwarfing to the pears. However, it has been found that Bartlett is not compatible with quince roots and it is necessary to double work these trees. By this we mean the trees must have an interstock, or section of a tree of a different type pear, which will unite with the quince root and then the Bartlett can be budded on this piece of pear stock with which it is compatible. It has been found that varieties such as Duchess and Old Home can be used for this interstock.

We have limited quantity of pear trees which are worked on type C quince roots with Duchess as an interstock. These trees will be quite dwarf and will produce heavy crops of fruit.

Double worked trees are more expensive to produce but are the only kind that will grow to satisfactory trees in your orchard. If you buy dwarf pears, insist on these trees.

BARTLETT/DUCHESS/QUINCE C

BOSC/DUCHESS/QUINCE C

For price of Dwarf Pear please add 25¢ to price of Dwarf Apple, Page 22.

"STURDY ROOT TREES" ARE TRUE TO NAME

To further safeguard the trueness-to-name of our trees, we have employed the Massachusetts Trueness-To-Name Inspection Service to check our trees in the nursery row. This year we had them check all the fields of rootstocks to guarantee that the trees you buy will be on the rootstock as labeled. This extra protection costs you no more when you buy "STURDY ROOT" brand fruit trees.

STATEMENT OF INSPECTION FOR TRUENESS-TO-NAME

Amherst, Mass.
August 10, 1961

To Whom It May Concern:

All saleable apple, pear, plum and sweet cherry varieties propagated and now growing at Hill Top Orchards and Nurseries, Hartford, Michigan have been examined by the Massachusetts Trueness-to-name Inspection Service. To the best of our knowledge, these trees are true to name as they now stand in the nursery row.

MASSACHUSETTS TRUENESS-TO-NAME
INSPECTION SERVICE

PLUM TREES

NOTE: We have a few plum trees on the dwarfing rootstocks Tomentosa and St. Julian A. See descriptions, Page 6.

Letters in parentheses following the name indicate rootstocks available: T—Tomentosa; SJ—St. Julian A; My—Myrobalan.

Standard plums are budded on Myrobalan rootstock.

Listed in order of ripening in SW Michigan.

SHIRO (My.). This very early plum is a real moneymaker. Fruits are round and clear, bright yellow, medium to large in size, and the tree produces abundantly. Fruit sells readily because of the very early season.

BLUEFRE (My-T-SJ). A new variety from the Missouri Experiment Station. A large, blue, free-stone, firm fleshed plum which ripens just ahead of Stanley, but hangs on the tree for three weeks in good condition. Well worthy of trial. SORRY, all sold out of Bluefre on Myrobalan for this season.

STANLEY (My.-T-SJ). This prune has superseded all others as a commercial variety in the Midwest. Fruit is large, blue and high quality; tree vigorous, bears early and heavy. SORRY, sold out of Stanley Myrobalan for this season.

YELLOW EGG (My.). Large, golden yellow plum on a vigorous, productive tree. An excellent late plum for cooking or eating out of hand.

Pollination: As many plums are self-sterile plant two or more varieties.

See prices of Plum on Page 23

APRICOTS

NARAMATA. Fruit is roundish, medium to large in size and of good quality. Skin is a pleasing yellow-orange with a bright red cheek. Tree is vigorous and a good producer. Those interested in apricots for orchard planting are invited to call or contact us for further information.

Apricots are priced on page 23

NECTARINES

The fruit of a nectarine is generally similar to the peach except that the skin is smooth and fuzzless. They have a distinctive flavor that is generally liked. The flesh of most varieties may tend to have a slight stringiness.

NECTARINES (Continued)

REDBUD. An early white fleshed, freestone nectarine, ripens about 27 days before Elberta. The 2" fruits are solid, smooth, attractive bright red. Fruit is quite resistant to brown rot. Tree is of average vigor and produces heavy crops of moderately frost resistant buds.

LEXINGTON. A new freestone nectarine from Virginia. Yellow fleshed, ovate, fruits are 2" or more in diameter. Color is deep yellow overlaid with medium red. Tree is very vigorous and sets a heavy crop of buds that are relatively hardy in spring frosts. Ripens 17 days before Elberta.

REDCHIEF. A new white fleshed nectarine introduced by the Virginia Experiment Station, that ripens about 10 days before Elberta. The fruit is attractive and highly colored. Flesh is reasonably firm, freestone, and of good quality. An outstanding characteristic of both REDCHIEF and CAVALIER (Below) is the ability to escape brown rot. Trees of both varieties are vigorous and productive. They produced up to five bushels of fruit at seven years old.

CAVALIER. A yellow fleshed, freestone, nectarine from Virginia. Ripens about eight days before Elberta with fruits that average about two inches in diameter. The ground color is an attractive orange-yellow, with splashed and mottled rather dark red over much of the surface. Fruits are particularly resistant to brown rot and resist cracking. We recommend these two varieties for trial plantings.

Please add 10¢ to price of Peach Trees Page 23.

GRAPES

One year old No. 1

| | Each | 100 | 1000 |
|-------------------------------|--------|---------|----------|
| CONCORD (Black) | \$.40 | \$16.00 | \$110.00 |
| NIAGARA (White) | .40 | 18.00 | 145.00 |
| GOLDEN MUSCAT (Yellow) | .45 | 25.00 | |

RASPBERRIES

(Black Varieties) No. 1 Tips

| | 25 | 100 | 250 | 1000 |
|-------------------|--------|---------|---------|---------|
| CUMBERLAND | \$3.00 | \$10.00 | \$21.50 | \$75.00 |
| LOGAN | 3.00 | 10.00 | 21.50 | 75.00 |

(Red Varieties) No. 1 Layers

| | 25 | 100 | 250 | 1000 |
|----------------------|--------|---------|---------|---------|
| LATHAM | \$3.00 | \$10.00 | \$22.50 | \$85.00 |
| INDIAN SUMMER | 3.50 | 11.00 | 23.50 | 95.00 |

(Fall Bearing)

BLUEBERRIES

| | Each | 10 | 100 | 1000 |
|-------------------------|--------|--------|---------|----------|
| 3 yr. 12" to 18" | \$1.00 | \$8.00 | \$65.00 | \$550.00 |
| 4 yr. 18" to 24" | 1.25 | 10.00 | 85.00 | 750.00 |

POINTS TO CONSIDER IN FIGURING PRICES

BIG SAVINGS—Combine your total order of trees of all kinds (except small fruits, grape vines and rootstocks) to determine the low quantity rate your order earns.

This Price List is for those engaged in the orchard business. The extra cost involved in processing, packing and shipping small orders of many items requires that we ask those ordering for home gardens to use the 1 to 9 price.

Please remember that these prices are for top quality trees which have been grown, dug, graded and packed with attention to every detail. If properly planted and cared for, they will all grow, and grow well, to develop into a profitable orchard for you.

Results will prove that in the long run these will be the least expensive trees you have ever bought.

The following prices are for strong, well rooted, one year old trees. The very few two-year old trees we sell are offered at the same price.

NOTE: The Caliper refers to the caliper of the tree 2" above the bud. Height is average and varies with varieties. In grading, caliper governs.

DWARF AND SEMI DWARF APPLE

Strong, 1 year trees, budded high to allow trees to be planted deep for good anchorage and yet leave the bud union 3 to 4 inches above the levelled ground.

MALLING II-VII-IX-XXV and ALNARP II rootstocks.

| Caliper | Height | 1-9 | 10-99 | 100 | Price Each | 1000 |
|--------------|--------|--------|--------|--------|------------|------|
| 5/8" and up | 5'-7' | \$2.75 | \$1.85 | \$1.60 | \$1.45 | |
| 1/2" to 5/8" | 4'-6' | 2.65 | 1.75 | 1.50 | 1.35 | |
| 3/8" to 1/2" | 3'-5' | 2.50 | 1.65 | 1.40 | 1.25 | |

MALLING-MERTON 104, 106, 109, 111 rootstocks.

| | | | | | | |
|--------------|-------|--------|--------|--------|--------|--|
| 5/8" and up | 5'-7' | \$2.90 | \$2.00 | \$1.75 | \$1.60 | |
| 1/2" to 5/8" | 4'-6' | 2.80 | 1.90 | 1.65 | 1.50 | |
| 3/8" to 1/2" | 3'-5' | 2.65 | 1.80 | 1.55 | 1.40 | |

APPLE TREES

1 yr. trees budded on Domestic Apple.

| Caliper | Height | 10-99 | 100 | Price Each | 1000 |
|------------------------|--------|--------|--------|------------|------|
| 7/8" and up, 6' up | | \$1.50 | \$1.20 | \$1.15 | |
| 11/16" to 7/8", 5'-7' | | 1.40 | 1.10 | 1.05 | |
| 9/16" to 11/16", 4'-6' | | 1.30 | 1.00 | .95 | |
| 7/16" to 9/16", 3'-5' | | 1.20 | .90 | .85 | |
| 5/16" to 7/16", 3'-4' | | 1.00 | .70 | .65 | |

CHERRIES SOUR

| Caliper | Height | 1-10 | 100 | 1000 |
|------------------------|--------|--------|--------|--------|
| 7/8" and up, 6' up | | \$1.60 | \$1.20 | \$1.15 |
| 11/16" to 7/8", 5'-6' | | 1.45 | 1.15 | 1.10 |
| 9/16" to 11/16", 4'-5' | | 1.35 | 1.05 | 1.00 |
| 7/16" to 9/16", 3'-4½" | | 1.25 | .90 | .85 |
| 5/16" to 7/16", 3'-4' | | 1.00 | .70 | .65 |

SWEET CHERRIES

1 yr. trees budded on Mahaleb or Mazzard roots
Please add 10¢ per tree for Mazzard roots

| | | | | |
|------------------------|--|------|------|------|
| 7/8" and up, 6' up | | 2.20 | 1.55 | 1.50 |
| 11/16" to 7/8", 5'-6' | | 2.10 | 1.45 | 1.40 |
| 9/16" to 11/16", 4'-5' | | 1.90 | 1.25 | 1.20 |
| 7/16" to 9/16", 3'-5' | | 1.60 | 1.00 | .95 |
| 5/16" to 7/16", 3'-4' | | 1.40 | .85 | .80 |

PEACHES

1 yr. trees on seedling peach roots

| | | | | |
|------------------------|--|------|------|------|
| 7/8" and up, 5' and up | | 1.45 | 1.10 | 1.05 |
| 11/16" to 7/8", 5'-6' | | 1.35 | 1.00 | .95 |
| 9/16" to 11/16", 4'-5' | | 1.25 | .90 | .85 |
| 7/16" to 9/16", 3'-5' | | 1.10 | .75 | .70 |
| 5/16" to 7/16", 3'-4' | | .90 | .55 | .50 |

PEARS

1 yr. trees on Bartlett seedling roots

| | | | | |
|------------------------|--|------|------|------|
| 7/8" and up, 6' up | | 1.50 | 1.20 | 1.15 |
| 11/16" to 7/8", 5'-6' | | 1.40 | 1.10 | 1.05 |
| 9/16" to 11/16", 4'-6' | | 1.30 | 1.00 | .95 |
| 7/16" to 9/16", 3'-5' | | 1.20 | .90 | .85 |
| 5/16" to 7/16", 3'-4' | | 1.00 | .70 | .65 |

PLUMS

1 yr. trees on Myrobalan roots

| | | | | |
|------------------------|--|------|------|------|
| 7/8" and up, 6' up | | 1.60 | 1.30 | 1.25 |
| 11/16" to 7/8", 5'-7' | | 1.50 | 1.20 | 1.15 |
| 9/16" to 11/16", 4'-6' | | 1.40 | 1.10 | 1.05 |
| 7/16" to 9/16", 3'-5' | | 1.30 | 1.00 | .95 |
| 5/16" to 7/16", 3'-4' | | 1.10 | .80 | .75 |

APRICOTS

1 yr. trees on peach or apricot roots

| | | | | |
|------------------------|--|------|------|------|
| 7/8' and up, 5' up | | 1.70 | 1.40 | 1.35 |
| 11/16" to 7/8", 5'-6' | | 1.60 | 1.30 | 1.25 |
| 9/16" to 11/16", 4'-5' | | 1.50 | 1.20 | 1.15 |
| 7/16" to 9/16", 3'-5' | | 1.40 | 1.10 | 1.05 |
| 5/16" to 7/16", 3'-4' | | 1.20 | .90 | .85 |

SUGGESTIONS ON SITE AND PLANTING

To have a profitable orchard you should give careful thought to the following points.

1. **SITE** should be frost-free as possible and have good air drainage.
2. **SOIL** should be deep, well drained and friable. Peach and cherry prefer the lighter soils, while plum, pear and apple will grow on either type.
3. **EARLY SPRING** is the best time to plant in northern areas, while fall or spring planting can be practiced further south.
4. **PLANT** only the best quality trees.
5. **POLLINATION.** Some varieties are self-sterile and will not produce fruit without another variety with acceptable pollen close by. Consult your local Horticultural Agent or ask us for suggestions.
6. **VARIETIES.** Check with your Hort. Agent or other successful growers in your area as to varieties that do well in your locality, or write us and we will give you our best advice.
7. **CARE ON ARRIVAL.** Examine the package for signs of frost in the packing material. If frost is found **DO NOT UNPACK**. Place package in a cool cellar, barn or garage until all signs of frost are gone. Several days or a week in a cool place will not hurt the trees. When frost is gone, unpack and plant, or heel in moist soil. Planting Directions are sent with each order.
8. **PRUNING.** It is most important to prune at least one-third of the wood from the tops of the trees at time of planting. (See Instructions). Young trees should be clean cultivated until August 1st each year and then a cover crop should be sown.
9. **RODENTS.** Protect young trees with guards made of $\frac{1}{2}$ " mesh hardware cloth about 15" high and 4" in diameter.
10. **FERTILIZER.** On well prepared fertile soil no fertilizer will be required the first year. On very poor soil it may be necessary to apply a small handful of complete fertilizer late in the spring after the tree has started to grow.
11. **WATERING.** Watch newly planted trees for drying out. Water at the first sign of dryness in the soil around the roots. Let several gallons soak in around the roots, which should do for a week.
12. **WARNING.** Make sure that trees on dwarfing rootstocks are planted with the bud 3 to 4 inches ABOVE THE LEVELLED GROUND.

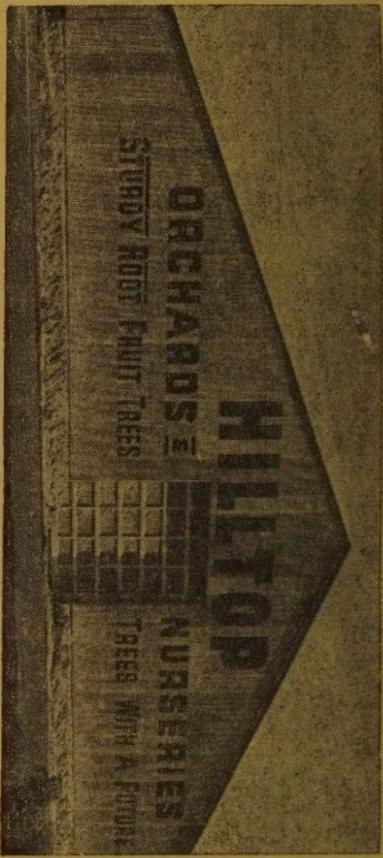
SUGGESTED INFORMATION ON THE PLANTING OF DWARF AND SEMI-DWARF APPLE TREES

| DWARF | | SEMI-DWARF TO STANDARD | | | | M.XXV | |
|----------------|--|------------------------|----------------------|-----------------------|--------------------|--------------------------|--------------------------------|
| Root | M.IX | M.VII or MM. 106 | M.II | MM.111 or Alnarp 2 | MM.104 | MM.109 | |
| Soil Type | Very fert. | Average Very fert. | Average | Very fert. | Average | Average | Average soils |
| Planting dist. | 18x26' 20x14' | 16x24' 12x18# | 20x28' 15x20# | 18x26' 14x20# | 20x28' 15x20# | 14x20'#/20x30' 18x26' | 36x36'+Filler 25x35'+Filler |
| Tr. Per acre | 340 263 | 93 156 | 113 201 | 78 145 | 93 156 | 78 145 | 34 52 |
| Support | Possibly on M.VII* | | May be desirable* | Not necessary | Not necessary | Not necessary | Not necessary |
| Use as filler | Very Neces. | Good | Possible | Possible | Possible | No | No |
| Permanents | Staked or Wired leader or Espalier | Yes | Yes | Yes | Yes | Yes | Yes |
| Pruning | | central leader | central leader | Central Leader | Modified leader | Modified leader | Modified leader |

Fillers to be removed when crowding begins leaving spacing 20x28' or 20x30'.

- Experience has shown that some loosening and possible leaning of Malling VII can occur under unfavorable conditions of wet soil and high winds. During the first 6 to 7 years most orchards are subjected to a severe storm that saturates the soil and is accompanied by high winds. Many growers are considering the desirability of staking plantings on Malling VII to insure undisturbed rooting and firm anchorage.

Plant
STURDY
ROOT
Brand
FRUIT
TREES



HARTFORD

Phone 2031

MICHIGAN

Special Price List For Orchardists
STURDY ROOT brand Trees With a Future

HARTFORD, MICHIGAN

We Grow The Trees We Sell
See policy inside front cover.

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